

FIG. 1

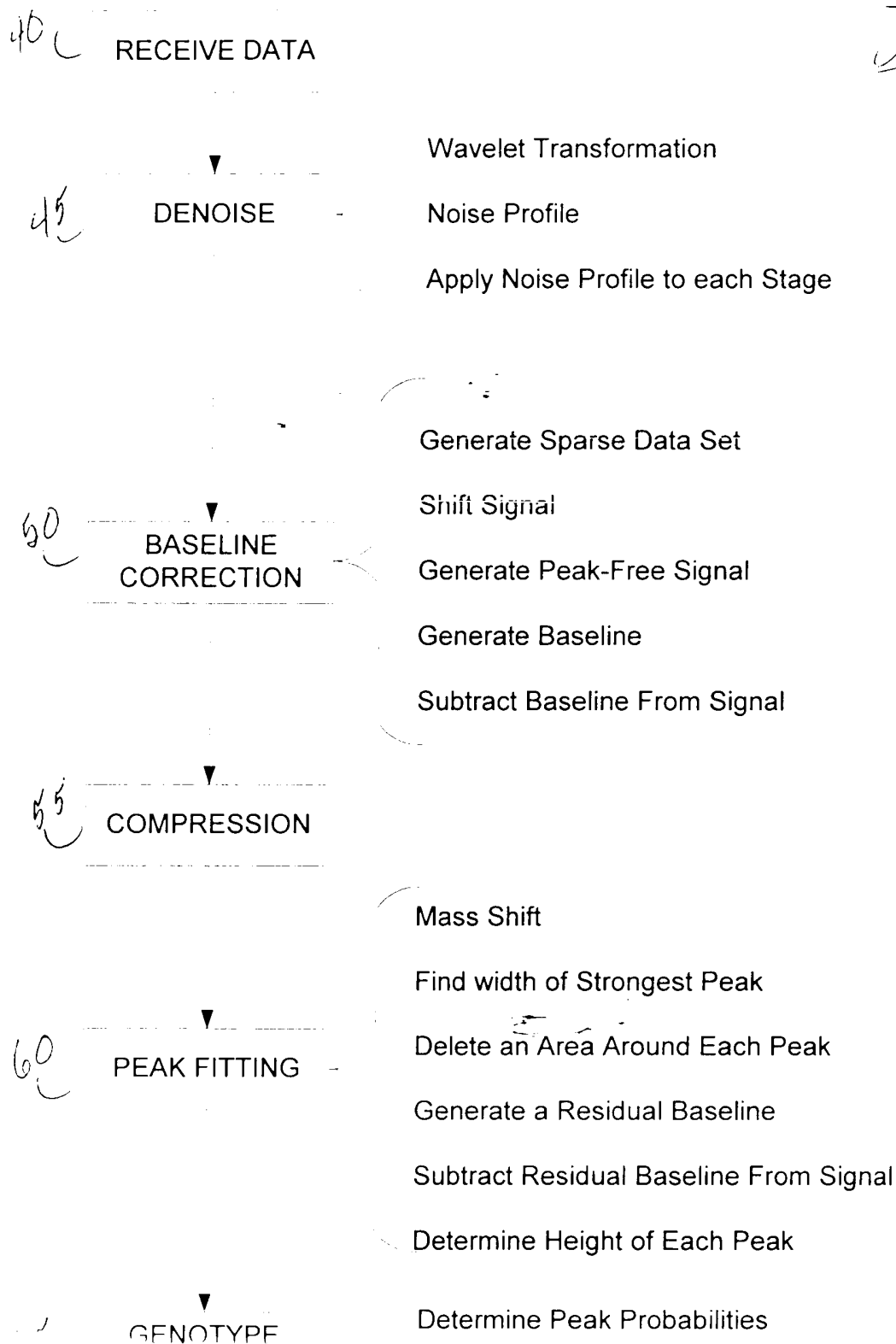


FIG. 2

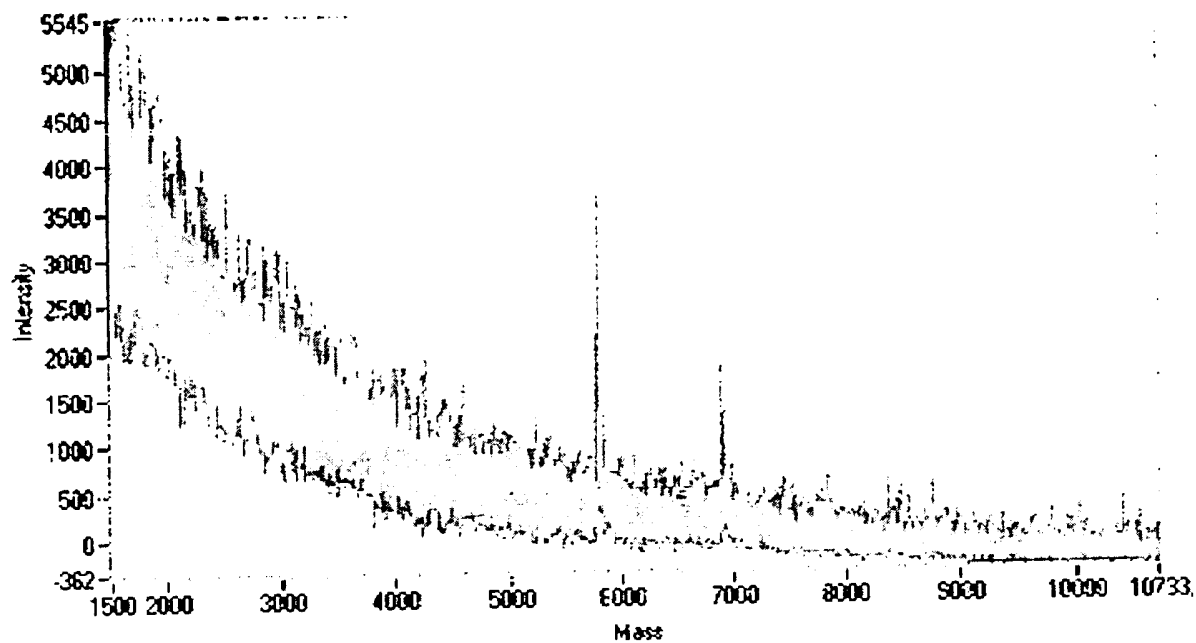


FIG. 3

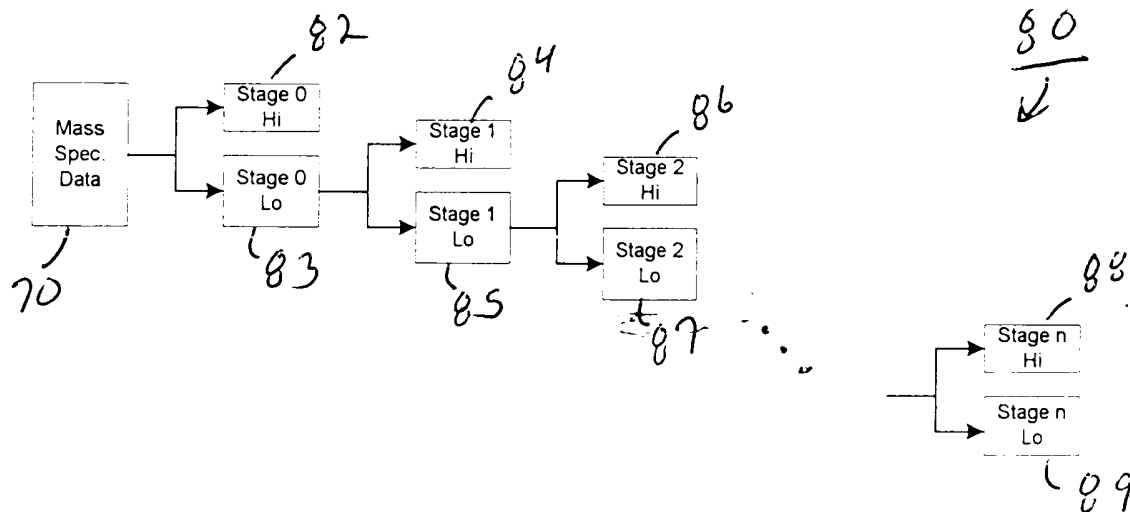


FIG. 4

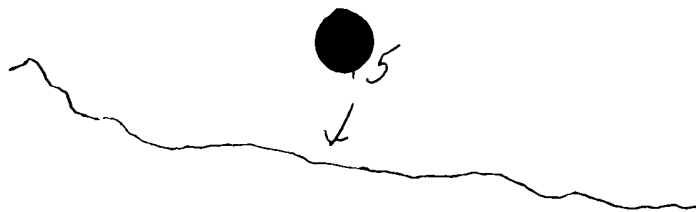


FIG. 5

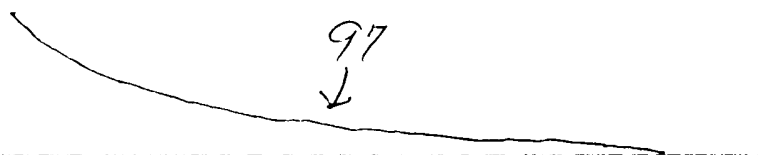


FIG. 6

Exp fitting  
 $a_0 + a_1 \exp(a_2 m)$

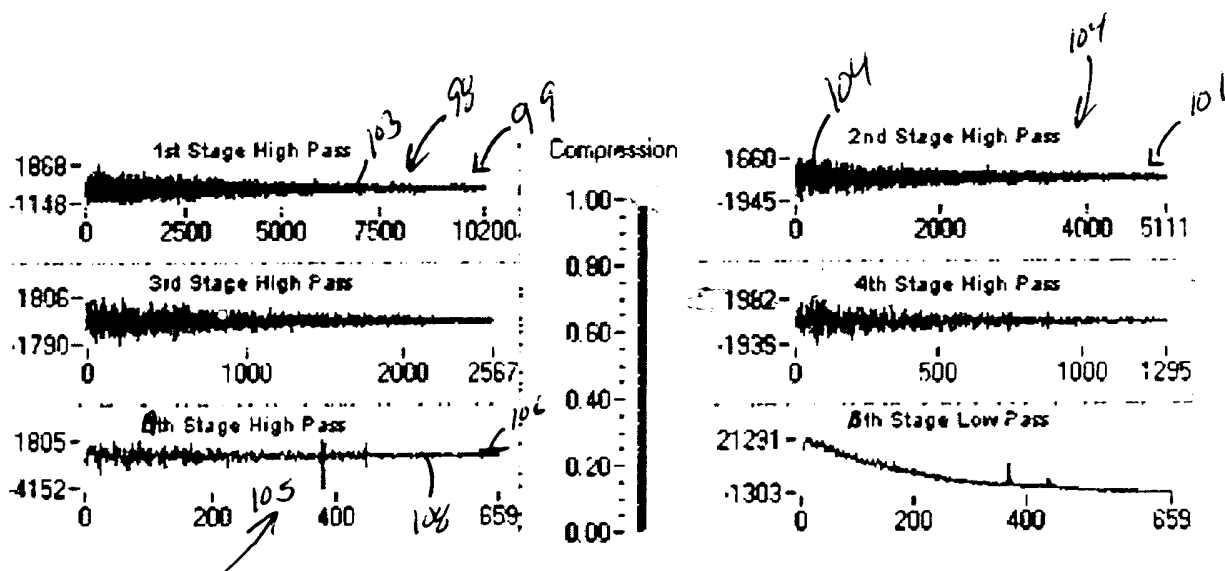


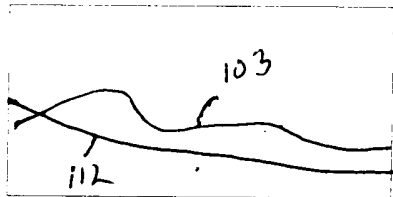
FIG. 7

Stage 0 - Hi



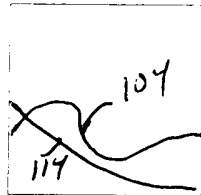
Threshold  $0 = 4 \times \text{NoiseProfile}$

Stage 1 - Hi



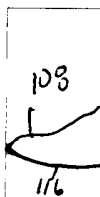
Threshold  $1 = 2 \times \text{NoiseProfile}$

Stage 2 - Hi



Threshold  $2 = 1 \times \text{NoiseProfile}$

Stage n - Hi



Threshold  $n = (1/2^{n-2}) \times \text{NoiseProfile}$

Stage n - Lo



FIG. 8

120  
↓

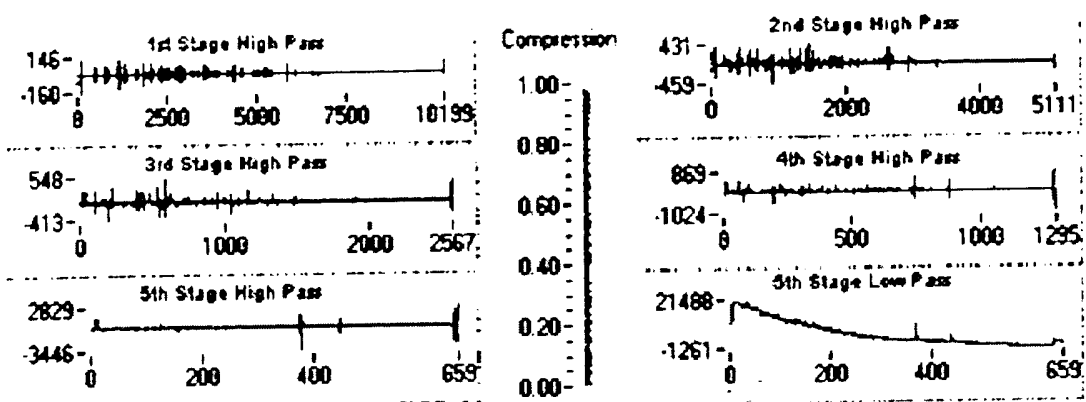
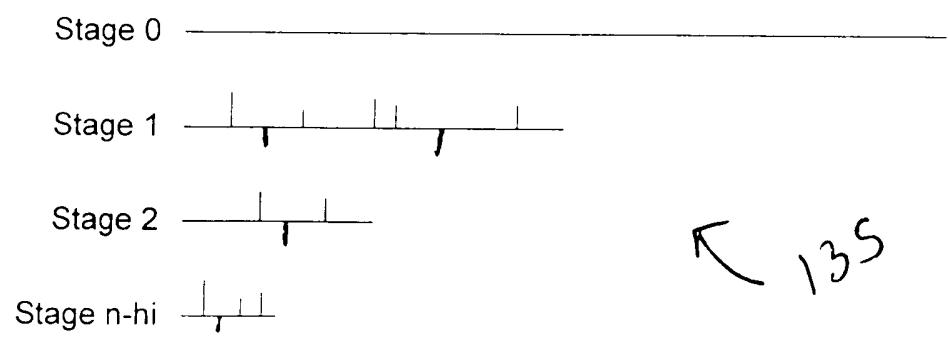


FIG 9

$$\text{Signal (t)} = \frac{(\text{Start 0(t)} + \text{Start 1(t)} + \text{Start 2 (t)} \dots + \text{Start 23 (t)})}{24}$$

FIG. 10 - SHIFT SIGNAL TO ACCOUNT FOR VARIATIONS DUE TO STARTING POINT



135  
↖

FIG. 11

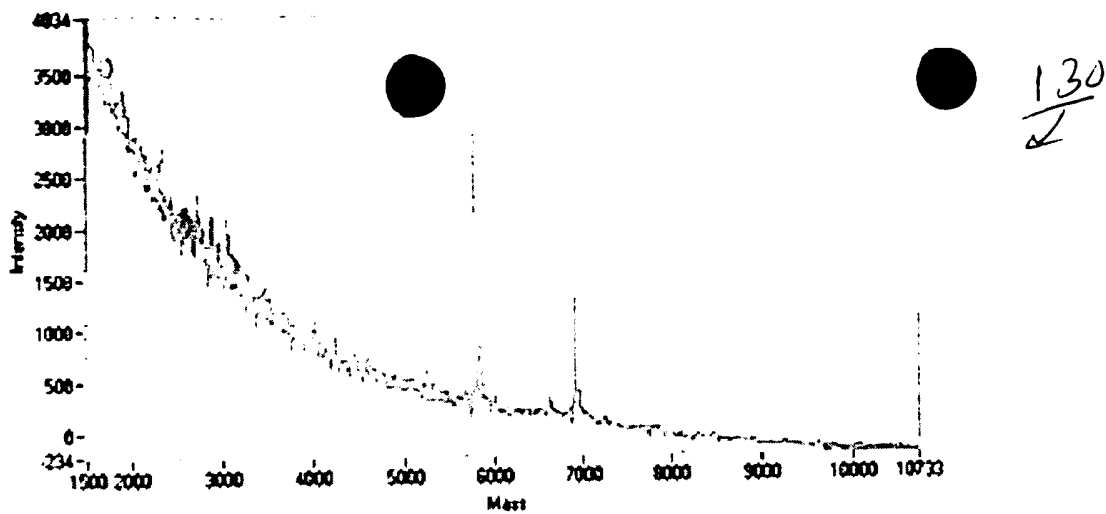


FIG 12

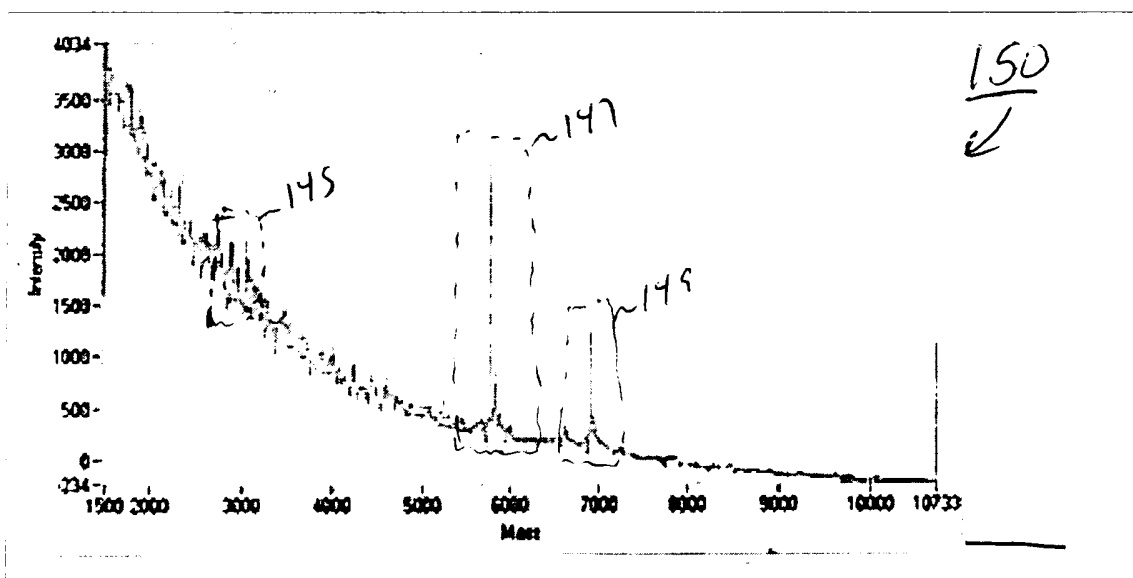


FIG. 13 - TAKE A MOVING AVERAGE, REMOVE SECTIONS EXCEDING A THRESHOLD

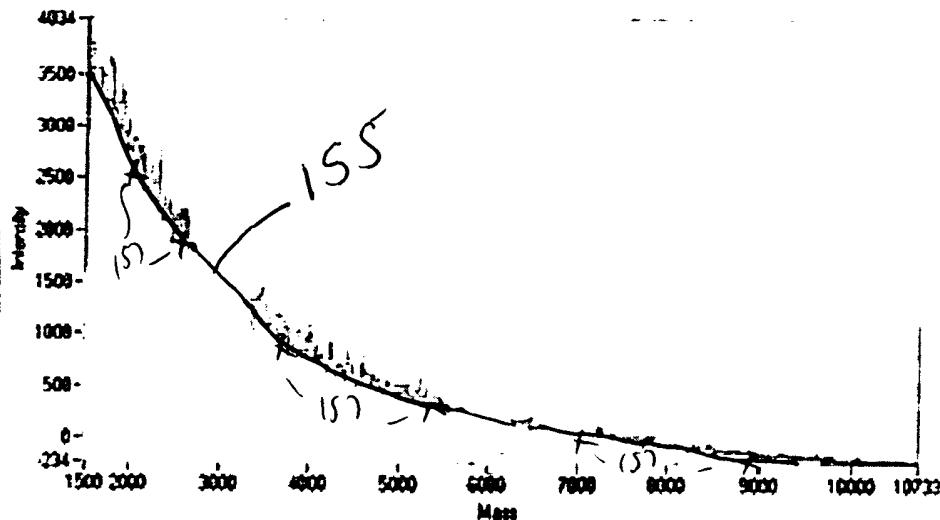


FIG. 14 - FIND MINIMA IN REMAINING SIGNALS AND CONNECT TO FORM A PEAK FREE SIGNAL

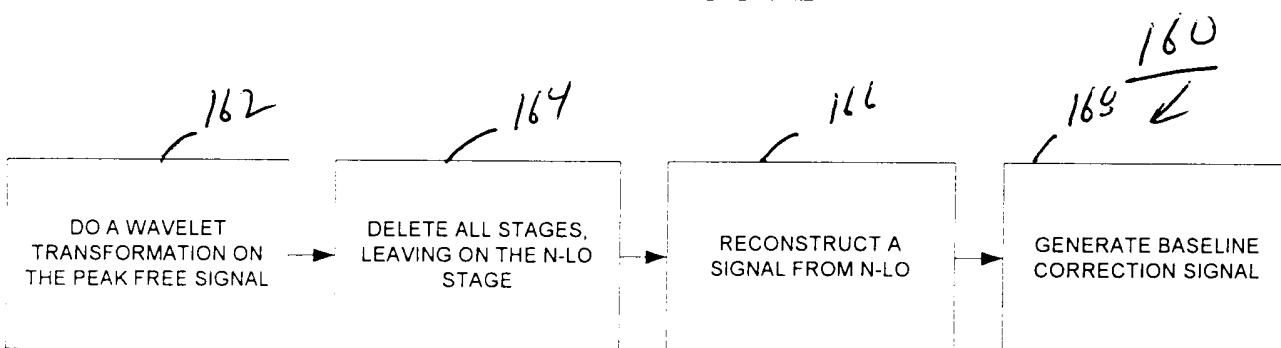


FIG. 15 - GENERATE BASELINE CORRECTION

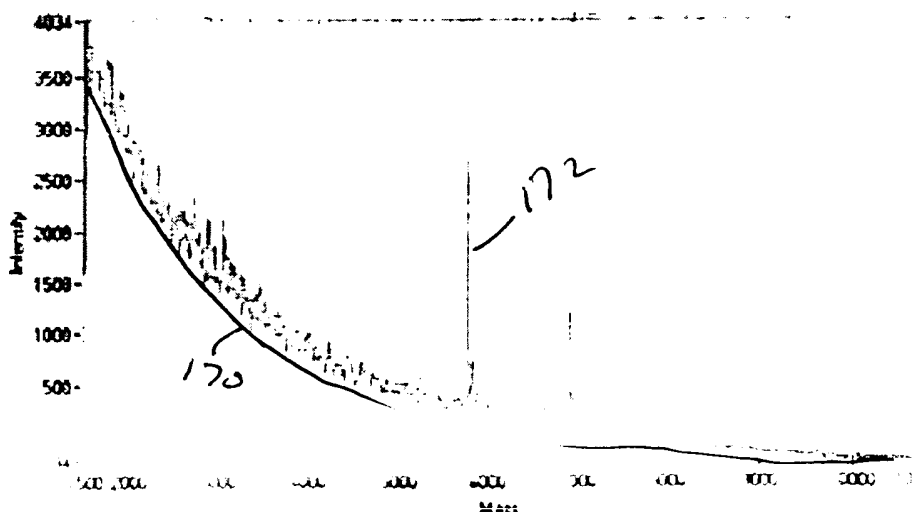


FIG. 16



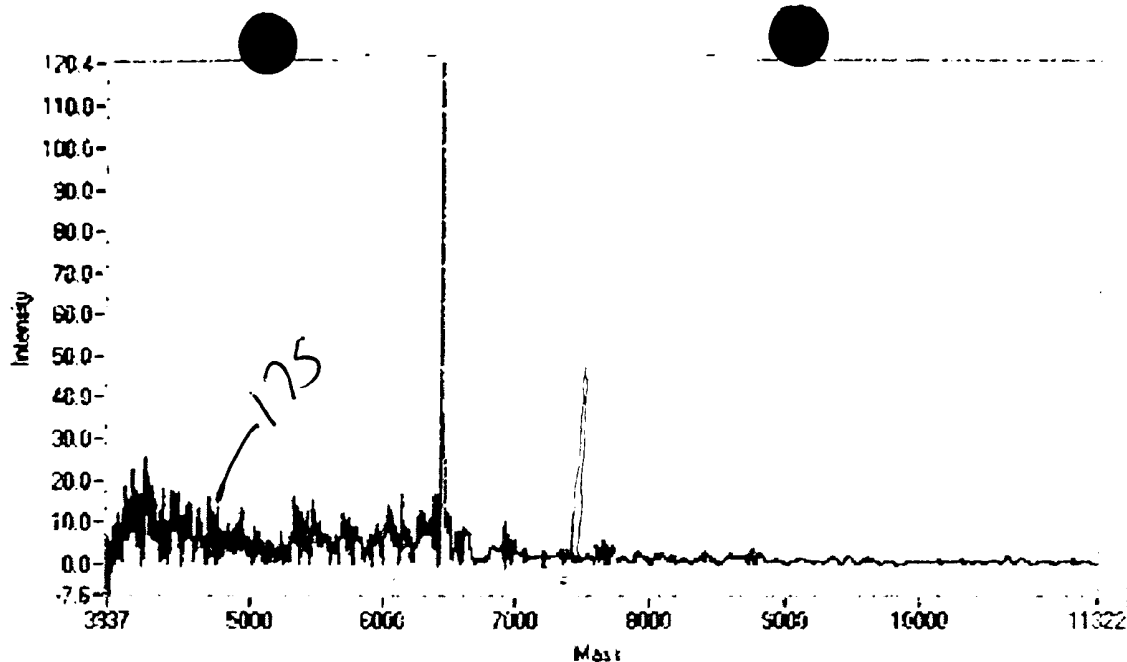


FIG. 17

NON-0 COEFFICIENTS	VALUE	INTERMEDIATE		RELATIVE
100	25	100.025	100	100.025
150	220	150.220	180	50.220
500	.1	500.0001	195	350.0001
10,050	800	10,050.8	186	9550.8
10,075	890	10,075.89	190	25.89
11,125	910	11,125.91		150.91
12,100	1000 (MAX)	12,100.99999		975.99999
13,250	940	13,250.94		1150.94

FIG. 18

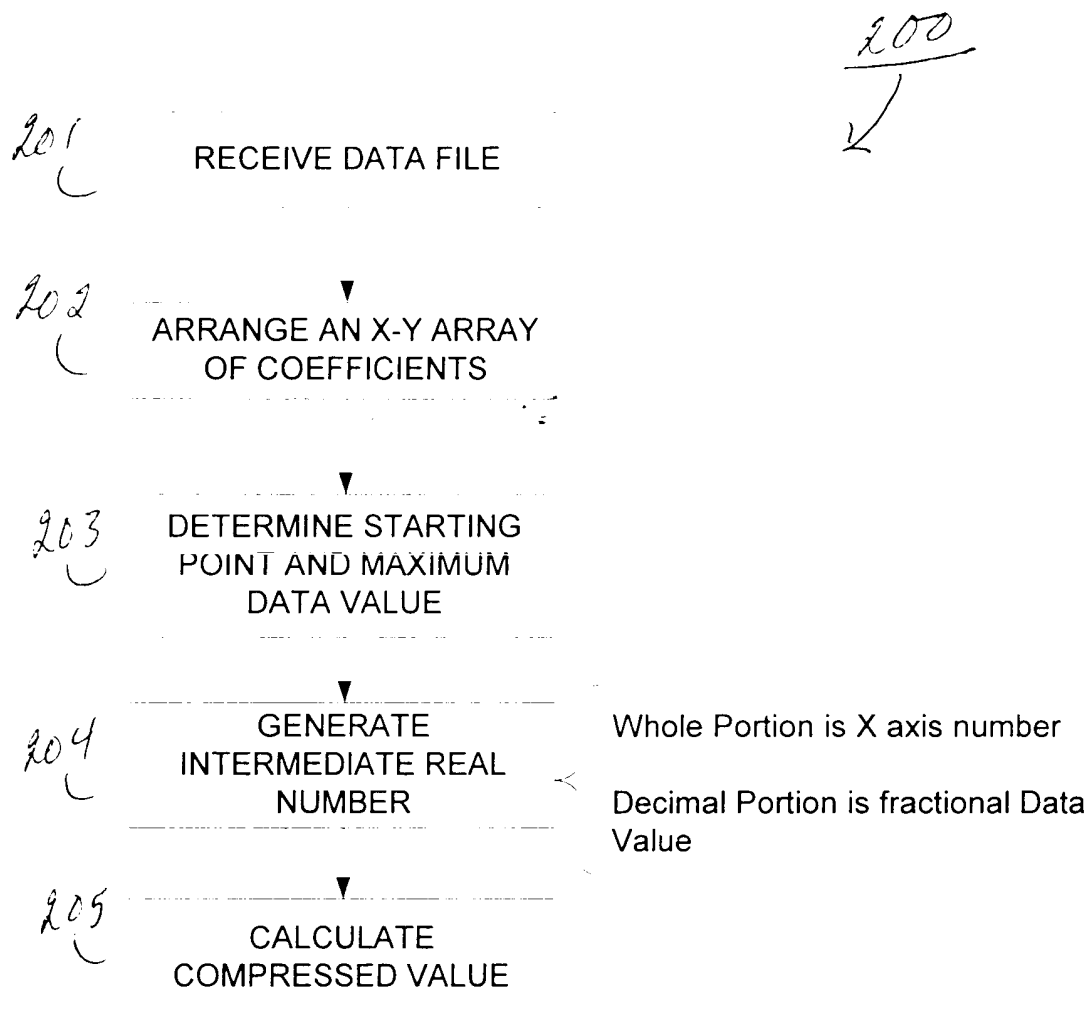


FIG. 19

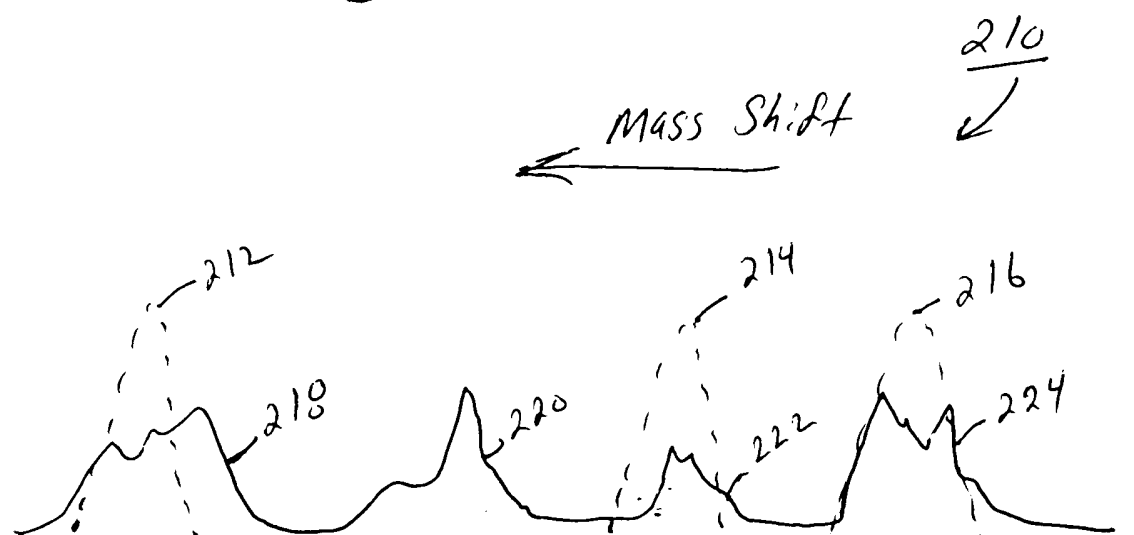


FIG. 20

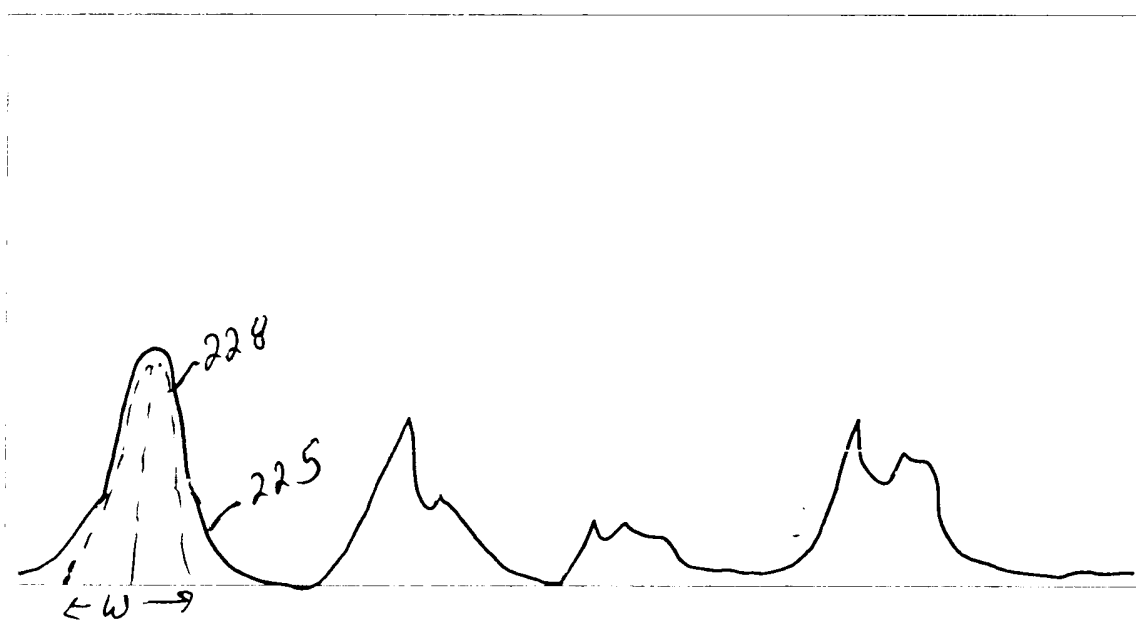


FIG. 21

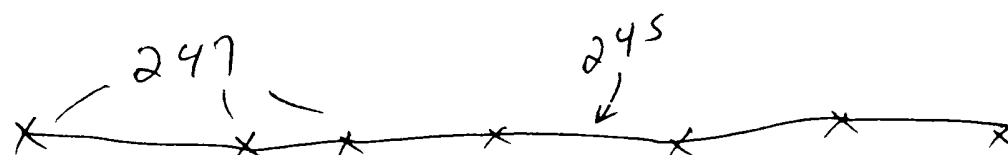
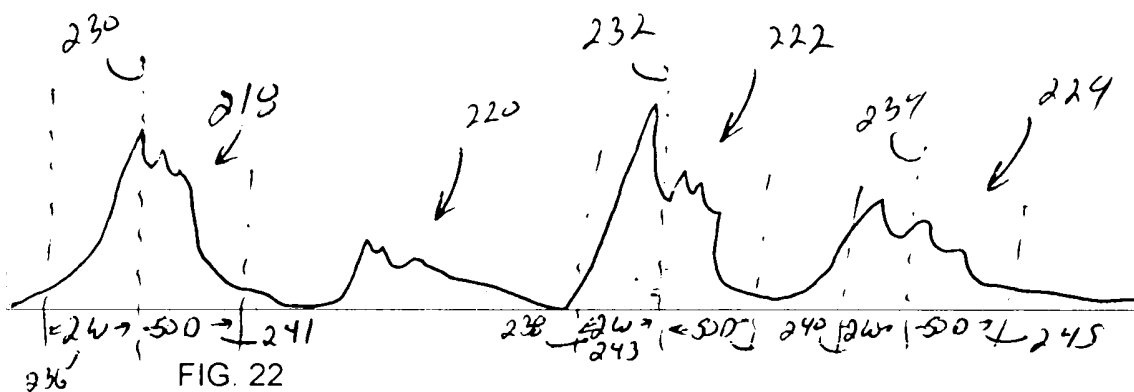


FIG. 23

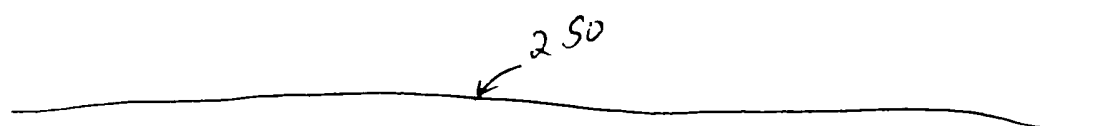


FIG. 24



FIG. 25

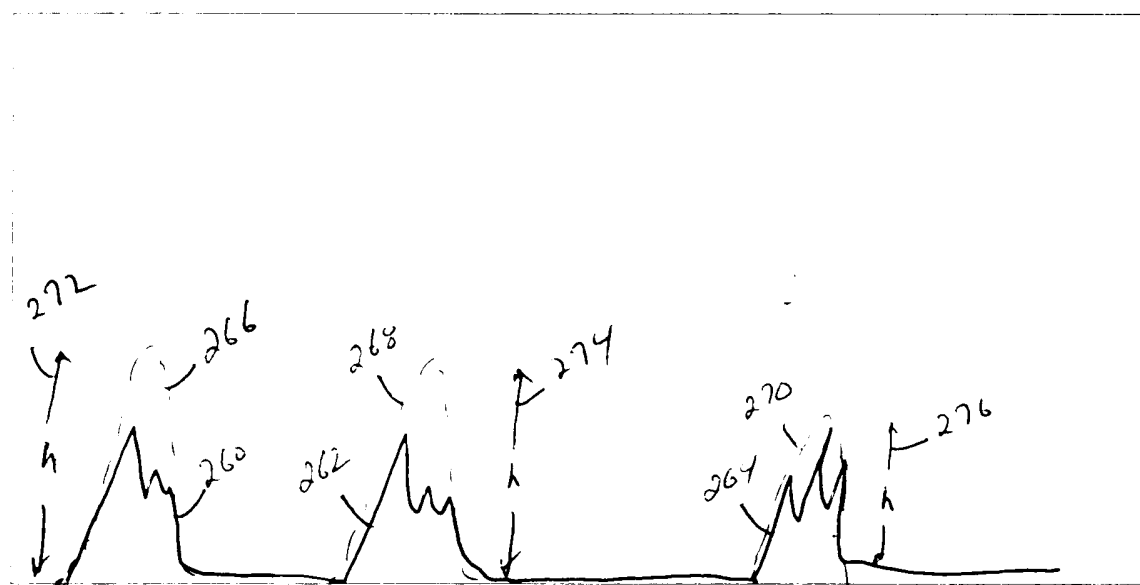


FIG. 26

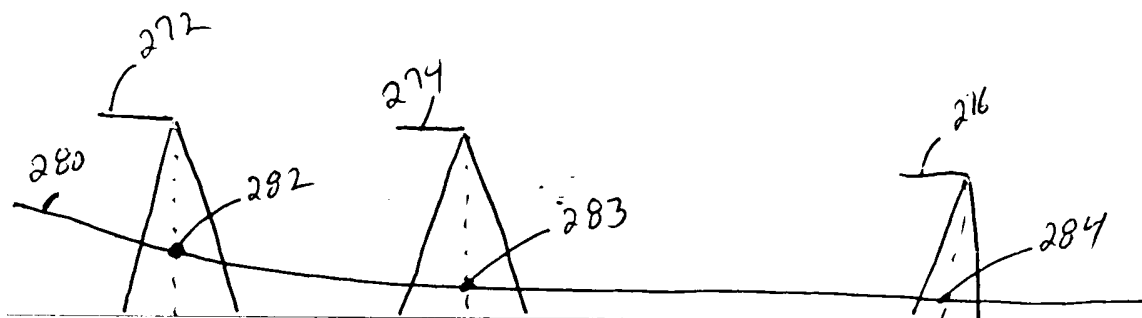


FIG. 27

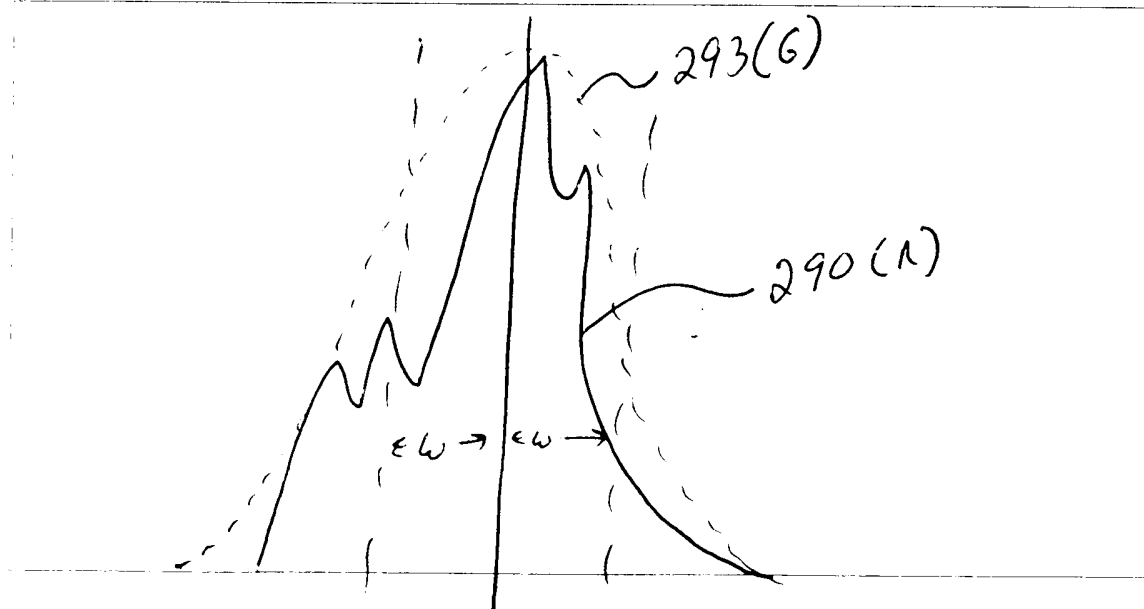
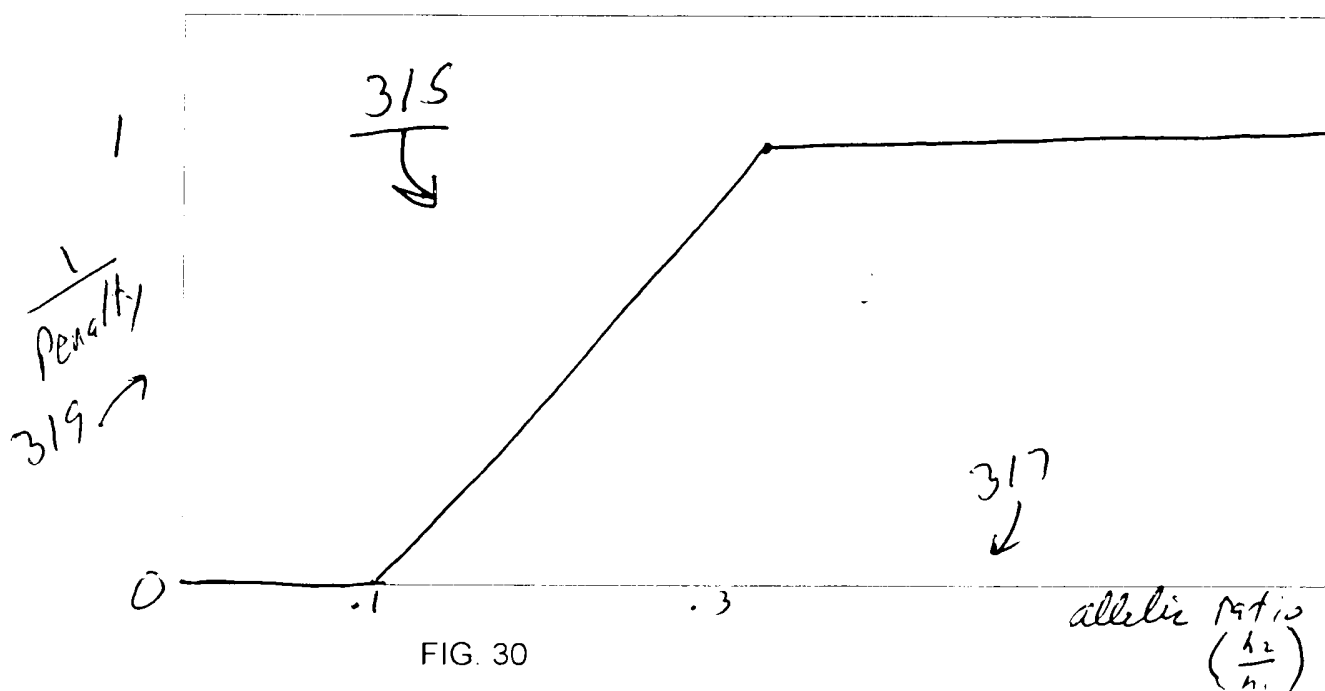
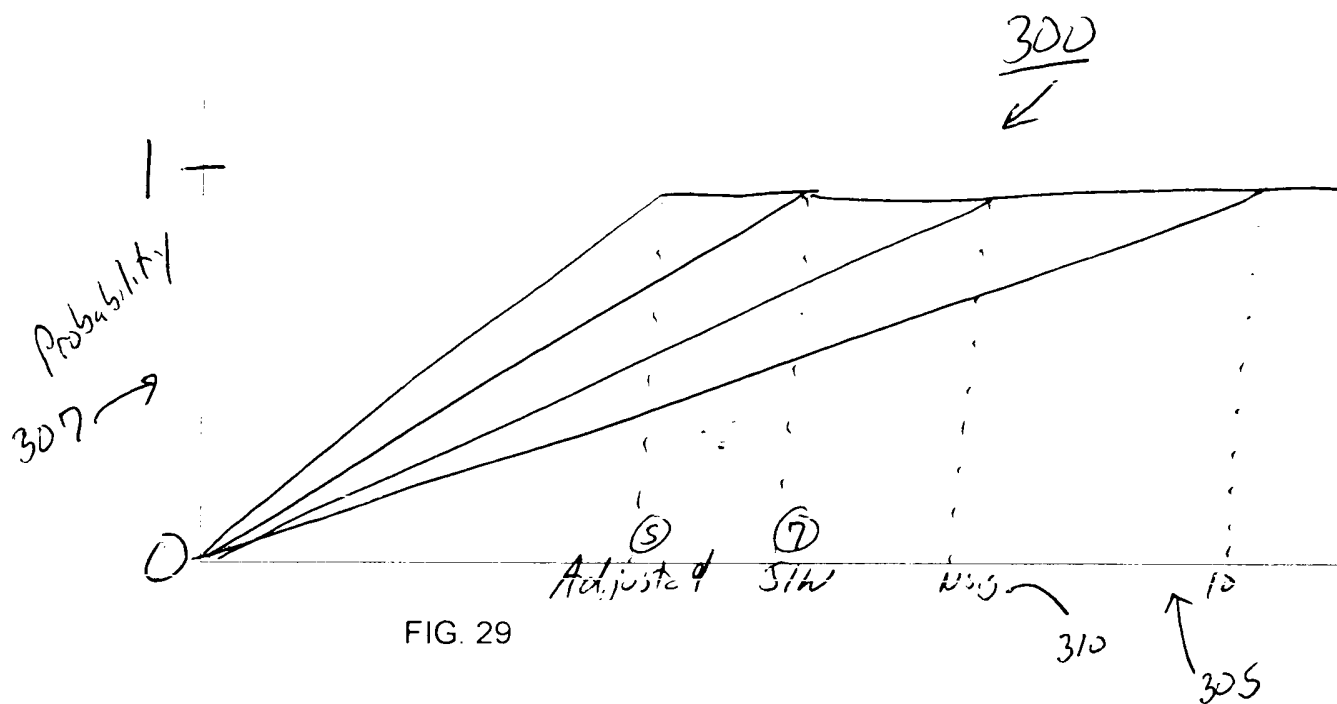
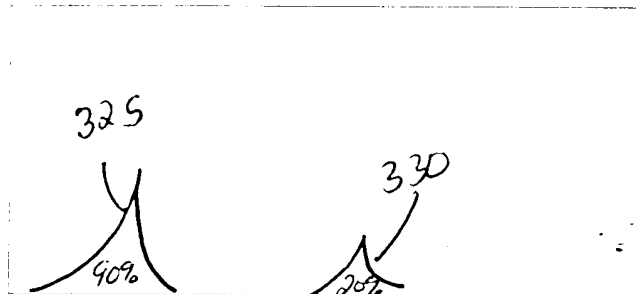


FIG. 28





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PROBABILITY OF GG EXISTING:

$$\begin{aligned} P(GG) &= P(G) * P(1-C) \\ &= 90\% * (100\% - 20\%) \\ &= 90\% * 80\% \\ &= 72\% \end{aligned}$$

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PROBABILITY OF CC EXISTING:

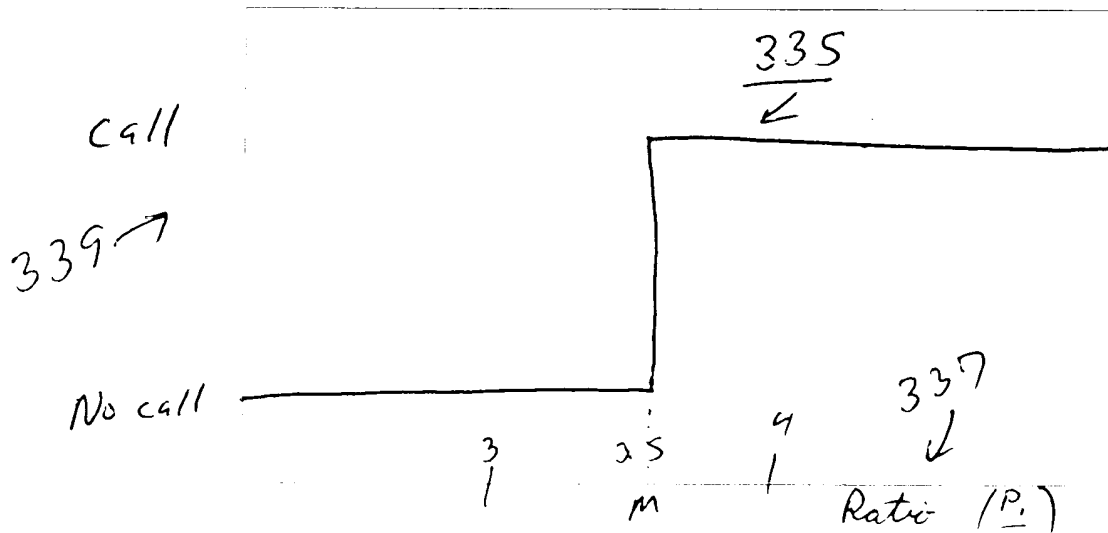
$$\begin{aligned} P(CC) &= P(C) * P(1-G) \\ &= 20\% * (100\% - 90\%) \\ &= 20\% * 10\% \\ &= 2\% \end{aligned}$$

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PROBABILITY OF GC EXISTING:

$$\begin{aligned} P(GC) &= P(G) * P(C) \\ &= 90\% * 20\% \\ &= 18\% \end{aligned}$$

FIG. 31





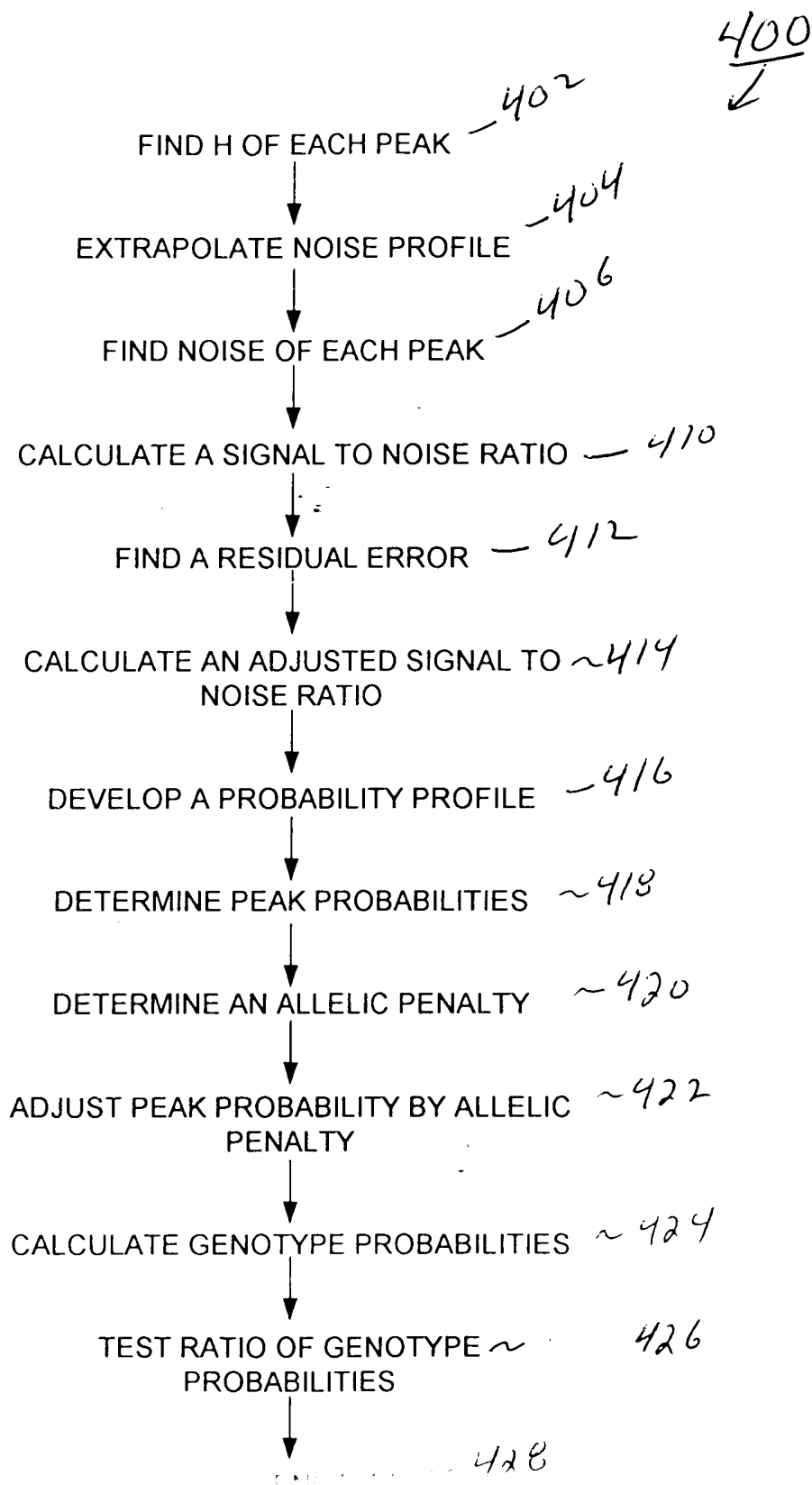


FIG. 33